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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,453	02/23/2004	Shaker Mousa		7779

7590 07/12/2005  
Vascular Vision Pharmaceuticals  
5 Fox Glove Ct.  
Wynantskill, NY 12198

EXAMINER

HADDAD, MAHER M

ART UNIT	PAPER NUMBER
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1644

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/783,453

Applicant(s)

MOUSA, SHAKER

Examiner

Maher M. Haddad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-24 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

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### DETAILED ACTION

An examination of this application reveals that applicant is unfamiliar with patent prosecution procedure. While an inventor may prosecute the application, lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed. Applicant is advised to secure the services of a registered patent attorney or agent to prosecute the application, since the value of a patent is largely dependent upon skilled preparation and prosecution. The Office cannot aid in selecting an attorney or agent.

A listing of registered patent attorneys and agents is available on the USPTO Internet web site <http://www.uspto.gov> in the Site Index under "Attorney and Agent Roster." Applicants may also obtain a list of registered patent attorneys and agents located in their area by writing to the Mail Stop OED, Director of the U. S. Patent and Trademark Office, PO Box 1450, Alexandria, VA 22313-1450

1. The following is noted:

- a) Claim 3 recites a method of diagnosis without reciting the essential elements used in the diagnosing method such as the anti-JAM antibodies. For examination purposes, claim 3 is being interpreted as intended to recite Anti-JAM-1, JAM-2 or JAM-3 antibodies.
- b) Claim 5 recites a product (i.e., kit) but depends from a method claim of claim 3. It appears that claim 3 should depend from claim 1.
- c) Claims 7 and 13 recite a product, but depend from claims 1 and 3, wherein claim 1 is a product claim and claim 3 is a method claim. For examination purposes, claims 7 and 13 are being interpreted as dependent from claim 1, which is also a product claim.
- d) Claims 10-12 recite a method but depend from claim 1-9, wherein claims 1 and 5-9 are product claims, while claims 2-4 are methods claims. It appears that claims 10-12 are intended to depend from any one of claims 2-4.
- e) Claims 14 and 16-23 recite a method, but depend from the product of claim 1 and the method of claim 3. It appears that said claims are intended to depend from the method of claim 3.
- f) Claim 15 recites a method but depends from the product of claim 1 and the method of claim 2. It appears that claim 15 is intended to depend from claim 2.
- g) Claim 24 recites a method but depends on the product of claim 1. For examination purposes, claim 24 is being interpreted as a product claim.

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Applicant is required to make the appropriate corrections.

2. Claims 7 and 10-23 are objected to under 37 CFR § 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n).
3. Claims 10-12 are objected to under 37 CFR § 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. For example claim 10 depends from claims 1-9 (i.e. multiple dependent), however, claim 7 is also depends from claim 1 and 3 (i.e., multiple dependent).
4. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
  - I. Claims 1, 5-9, 13 and 24, drawn to a diagnostic and prognostic assay kit comprising an antibody that specifically binds to JAM-1, classified in Class 435, subclasses 810 and 975.
  - II. Claims 1, 5-9, 13 and 24, drawn to a diagnostic and prognostic assay kit comprising an antibody that specifically binds to JAM-2, classified in Class 435, subclasses 810 and 975.
  - III. Claims 1, 5-9, 13 and 24, drawn to a diagnostic and prognostic assay kit comprising an antibody that specifically binds to JAM-3, classified in Class 435, subclasses 810 and 975.
  - IV. Claims 1 and 5, drawn to a diagnostic and prognostic assay kit comprising an antibody that specifically binds to JAM-1, JAM-2 and JAM-3, classified in Class 435, subclasses 810 and 975.
  - V. Claims 2, 10-12 and 15, drawn to a method of therapeutics for treating angiogenesis-and inflammation –mediated condition with anti-JAM-1 antibody classified in Class 424, subclass 145.1.
  - VI. Claims 2, 10-12 and 15, drawn to a method of therapeutics for treating angiogenesis-and inflammation –mediated condition with anti-JAM-2 antibody classified in Class 424, subclass 145.1.
  - VII. Claims 2, 10-12 and 15, drawn to a method of therapeutics for treating angiogenesis-and inflammation –mediated condition with anti-JAM-3 antibody, classified in Class 424, subclass 145.1.
  - VIII. Claims 3-4, 10-12 and 14-23, drawn to a method of diagnosing using anti-JAM-1 antibody, classified in Class 435, subclass 7.1.

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- IX. Claims 3-4, 10-12 and 14-23, drawn to a method of diagnosing using anti-JAM-2 antibody, classified in Class 435, subclass 7.1.
- X. Claims 3-4, 10-12 and 14-23, drawn to a method of diagnosing using anti-JAM-3 antibody, classified in Class 435, subclass 7.1.

5. Groups I-IV are different products. Various antibodies to the different polypeptides differ with respect to their structures and physicochemical properties; therefore each product is patentably distinct.

6. Groups V-X are different methods. Various methods of therapeutic treatment and various methods of diagnosing differ with respect to ingredients (anti-JAM-1, JAM-2 or JAM-3 antibodies), method steps, and endpoints; therefore, each method is patentably distinct.

7. Groups I/(V and VIII), II/(VI and IX) and III/(VII and X) are related as product and process of using. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the antibodies of Groups I-III can be used for affinity purification, in addition to the methods of treating and diagnosing recited.

8. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct method steps. Therefore restriction for examination purposes as indicated is proper. Further, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention.

### *Species Election*

9. Irrespective of whichever group applicant may elect, applicant is further required under 35 US 121 (1) to elect a single disclosed species to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added.

- I. If Group V, VI or VII is elected, applicant is required to elect a method of therapeutics treatment for angiogenesis- and inflammation-mediated condition such as a) vascular disorders, b) ocular disorders, c) cardiovascular, d) cancer, e) rheumatoid arthritis, f) thrombosis or g) sickle cell disease. These species are distinct because the

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pathological conditions differ in etiologies and therapeutic endpoints; thus each condition represents patentably distinct subject matter.

- II. If Group VIII, IX or X is elected, applicant is required to elect a method of diagnosis such as a) cardiovascular disorders, b) monitoring various therapies for cardiovascular diseases, c) unstable angina, d) myocardial infarction, e) stroke, f) peripheral vascular disorders, g) acute/chronic inflammatory disorders, h) monitoring various therapies for inflammatory diseases, i) angiogenesis mediated disorders or j) monitoring various therapies for angiogenesis-mediated disorders. These species are distinct because the pathological conditions differ in etiologies and therapeutic endpoints; thus each condition represents patentably distinct subject matter.

Applicant is required under 35 U.S.C. § 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

10. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

11. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

12. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend**

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**from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

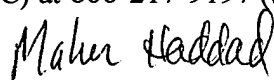
In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maher Haddad whose telephone number is (571) 272-0845. The examiner can normally be reached Monday through Friday from 7:30 am to 4:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 7, 2005



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